

WHAT WE CLAIM IS:

1. A method of trimming a semiconductor integrated circuit device including an analog circuit, a nonvolatile storage element and a trimming circuit for trimming said analog circuit, comprising:

a first trimming step including storing, in said nonvolatile storage element, a first trimming data of said analog circuit of said semiconductor integrated circuit device formed on a semiconductor wafer;

a step of encapsulating said semiconductor integrated circuit device in a package; and

after said encapsulating step, a second trimming step including storing, in said nonvolatile storage element, a second, different trimming data for performing fine trimming of said analog circuit,

wherein, in said second trimming step, said storing of said second trimming data in said nonvolatile storage element is electrically performed.

2. A method of trimming a semiconductor integrated circuit device according to claim 1,

wherein, in said second trimming step, said second trimming data is electrically stored in said nonvolatile storage element by applying a voltage to an external terminal of said semiconductor integrated circuit device, which is encapsulated in said package,

for changing states of said nonvolatile storage element.

3. A method of trimming a semiconductor integrated circuit device according to claim 1,

wherein said nonvolatile storage element includes a control gate electrode and a floating gate electrode which are overlapped with each other through an intervening insulating film.

4. A method of trimming a semiconductor integrated circuit device according to claim 1,

wherein said first trimming data consists of upper bits of a trimming data, and

wherein said second trimming data consists of lower bits of said trimming data.

5. A method of trimming a semiconductor integrated circuit device including a function block, an element and a trimming circuit for trimming said function block, comprising:

a first trimming step including storing, in said element, a first trimming data of said function block of said semiconductor integrated circuit device formed on a semiconductor wafer;

a step of encapsulating said semiconductor integrated circuit device in a package; and

after said encapsulating step, a second trimming step including storing, in said element, a second, different trimming

data for performing fine trimming of said function block,

wherein, in said second trimming step, said storing of said second trimming data in said element is electrically performed.

6. A method of trimming a semiconductor integrated circuit device according to claim 5,

wherein said first trimming data consists of upper bits of a trimming data,

wherein said second trimming data consists of lower bits of said trimming data.

7. A method of trimming a semiconductor integrated circuit device according to claim 5,

wherein, in said second trimming step, said second trimming data is electrically stored in said element by applying a voltage to an external terminal of said semiconductor integrated circuit device, which is encapsulated in said package, for changing states of said element.

8. A method of setting a circuit function of a semiconductor integrated circuit device according to claim 5,

wherein said element is a nonvolatile storage element.

9. A method of setting a circuit function of a semiconductor integrated circuit device according to claim 5,

wherein said function block is an analog circuit.

10. A method of setting a circuit function of a semiconductor integrated circuit device including a function block and a function setting circuit for said function block, comprising:

a first function setting step including setting of the circuit function of said function block of said semiconductor integrated circuit device formed on a semiconductor wafer;

a step of encapsulating said semiconductor integrated circuit device in a package; and

after said encapsulating step, a second function setting step including setting of the circuit function of said function block of said semiconductor integrated circuit device,

wherein, in said second function setting step, said setting of circuit function of said function block is electrically performed.

11. A method of setting a circuit function of a semiconductor integrated circuit device according to claim 10,

wherein said function setting circuit includes an element for storing data for setting the circuit function of said function block, and

wherein in said second function setting step, said setting of the circuit function of said function block is electrically performed by applying a voltage to an external terminal of said semiconductor integrated circuit device, which is encapsulated in said package, for changing states of said element.

12. A method of setting a circuit function of a semiconductor integrated circuit device according to claim 11, wherein said element is a nonvolatile storage element including a control gate electrode and a floating gate electrode which are overlapped with each other through an intervening insulating film.

13. A method of setting a circuit function of a semiconductor integrated circuit device according to claim 10, wherein said function block is an analog circuit, wherein said function setting circuit is a trimming circuit for trimming said analog circuit, and wherein in said second function setting step, the trimming data is set finer than the trimming data set in said first function setting step.

14. A semiconductor integrated circuit device comprising:
an analog circuit formed on a semiconductor substrate;
a nonvolatile storage element formed on said semiconductor substrate; and
a trimming circuit, formed on a semiconductor substrate, for trimming said analog circuit,
wherein said semiconductor integrated circuit device is encapsulated in a package,
said trimming circuit having a first trimming data, determined in said semiconductor integrated circuit device before

said semiconductor integrated circuit device is encapsulated, for trimming said analog circuit and a second, different trimming data, determined after encapsulating said semiconductor integrated circuit device in said package, for performing a fine trimming of said analog circuit,

said trimming circuit includes a nonvolatile storage element for storing said first trimming data and said second trimming data,

wherein said second trimming data is electrically stored in said nonvolatile storage element by applying a voltage to an external terminal of said semiconductor integrated circuit device for changing states of said nonvolatile storage element.

15. A semiconductor integrated circuit device according to claim 14, wherein said nonvolatile storage element including a control gate electrode and a floating gate electrode which are overlapped with each other through an intervening insulating film.

16. A semiconductor integrated circuit device according to claim 14,

wherein said first trimming data consists of upper bits of a trimming data, and

wherein said second trimming data consists of lower bits of said trimming data.